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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,903	10/21/2003	Mitsuo Yasushi	040894-5969	3921

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EXAMINER	
ADAMS, CHARLES D	
ART UNIT	PAPER NUMBER
2164	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/688,903	YASUSHI ET AL.	
	Examiner	Art Unit	
	Charles D. Adams	2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 November 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11-03-06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Remarks

1. In response to communications filed on 3 November 2006, claims 1 and 7-8 are amended. Claims 1-8 are pending in the application.

2. Applicant's arguments with respect to the 35 U.S.C. 112 have been fully considered and are persuasive. The rejection of "a degree of similarity" for being indefinite has been withdrawn.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "the selected piece of music" in line 2. There is insufficient antecedent basis for this limitation in the claim, as, in claim 1, "a plurality of pieces of music" are selected.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-2 and 7-8 rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (US Patent 7,072,846) in view of Jacobi et al. (US Pre-Grant Publication 2006/0195362).

As to claim 1, Robinson teaches:

Comparing, on a basis of degree of similarity, representative music, which the user has set and serves as a basis for the search, with a plurality of pieces of music, which are search targets (see Robinson 9:31-38 and 9:58-64);

Selecting, on a basis of comparison results, a plurality of pieces (see Robinson 10:35-45);

Robinson does not teach in descending order of the degree of similarity;

Jacobi et al. teaches in descending order of the degree of similarity (see Jacobi et al. paragraphs [0063] and [0072]); and

Robinson as modified teaches sorting the pieces of selected music based on stimulation coefficients calculated by dividing the similarities of the pieces of selected music by the played frequencies of the pieces of selected music (As Robinson teaches using played frequencies as a variable to determine popularity, in 12:38-42 and 12:46-67, and Jacobi et al. teaches dividing a degree of similarity between two items by a variable indicating popularity (number of times purchased, paragraphs [0082]-[0084]), it would have been obvious to one

of ordinary skill in the art to simply use "number of times played" in lieu of "number of times purchased", as both are variables quantify popularity. Jacobi et al. teaches sorting the result of these calculations in paragraph [0086]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Robinson by the teaching of Jacobi et al., since Jacobi et al. teaches that "an important benefit of the service is that the recommendations are generated without the need for the user, or any other users, to rate items" (see paragraph [0011]).

As to claim 2, Robinson as modified teaches wherein the selected piece of music is a plurality of pieces of music (see Robinson 9:31-38);

The music searching method further comprising:

Referencing played frequencies, which are associated the selected pieces of music, respectively (see Robinson 11:33-46); and

Sorting, on the basis of the played frequencies, the selected pieces of music in ascending order or descending order (see Robinson 11:33-46).

As to claim 7, Robinson teaches:

A representative music setting unit configured to set representative music serving as a basis for the search (see Robinson 9:31-38 and 9:58-64);

A comparing unit configured to compare, on a basis of degree of similarity, the representative music and a plurality pieces of music, where are search targets (see Robinson 9:31-38 and 9:58-64);

A similar music selecting unit configured to select, on a basis of comparison results, a plurality of pieces of music (see Robinson 10:35-45)

Robinson does not in descending order of the degree of similarity;

Jacobi et al. teaches in descending order of the degree of similarity (see Jacobi et al. paragraphs [0063] and [0072]);

Robinson as modified teaches:

A list generating unit configured to generate a music list in which the selected pieces of music are stored in ascending order or descending order on a basis of a stimulation coefficient of each of the selected pieces of music, the stimulation coefficients calculated by dividing the similarities of the pieces of selected music by the played frequencies o the pieces of selected music (As Robinson teaches using played frequencies as a variable to determine popularity, in 12:38-42 and 12:46-67, and Jacobi et al. teaches dividing a degree of similarity between two items by a variable indicating popularity (number of times purchased, paragraphs [0082]-[0084]), it would have been obvious to one of ordinary skill in the art to simply use "number of times played" in lieu of "number of times purchased", as both are variables that quantify popularity. Jacobi et al. teaches sorting the result of these calculations in paragraph [0086]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Robinson by the teaching of Jacobi et al., since Jacobi et al. teaches that "an important benefit of the service is that the recommendations are generated without the need for the user, or any other users, to rate items" (see paragraph [0011]).

As to claim 8, Robinson teaches:

Comparing, on a basis of degree of similarity, representative music, which the user has set and serves as a basis for the search, with a plurality of pieces of music, which are search targets (see Robinson 9:31-38 and 9:58-64);

Selecting, on a basis of comparison results, a plurality of pieces of music (see Robinson 10:35-45)

Robinson does not teach in descending order of the degree of similarity;

Jacobi et al. teaches in descending order of the degree of similarity (see Jacobi et al. paragraphs [0063] and [0072]);

Robinson as modified teaches:

Sorting the pieces of selected music based on stimulation coefficients calculated by dividing the similarities of the pieces of selected music by the played frequencies of the pieces of selected music (As Robinson teaches using played frequencies as a variable to determine popularity, in 12:38-42 and 12:46-67, and Jacobi et al. teaches dividing a degree of similarity between two items by a variable indicating popularity (number of times purchased, paragraphs [0082]-[0084]), it would have been obvious to one of ordinary skill in the art to simply use "number of times played" in lieu of "number of times purchased", as both are variables that quantify popularity. Jacobi et al. teaches sorting the result of these calculations in paragraph [0086]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Robinson by the teaching of

Jacobi et al., since Jacobi et al. teaches that "an important benefit of the service is that the recommendations are generated without the need for the user, or any other users, to rate items" (see paragraph [0011]).

6. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (US Patent 7,072,846) in view of Jacobi et al. (US Pre-Grant Publication 2006/0195362), and further in view of Seto et al (US Pre-Grant Publication 2002/0041692).

As to claim 3, Robinson as modified teaches the method of claim 2.

Robinson as modified does not teach updating the played frequencies each time a piece of music is played; and

Seto et al. teaches updating the played frequencies each time a piece of music is played (see paragraph [0038]); and

Robinson as modified teaches:

Sorting, on the basis of the updated played frequencies, the selected pieces of music in ascending order or descending order (see Seo et al. paragraph [0038] and Figures 2 and 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Robinson to include the teaching of Seto et al., since Seto et al. teaches that "providing a favorite piece of music to a vehicle driver during a driving operation of the vehicle driver, detects favorite information to discriminate favorite tendency of the vehicle driver with

respect to the favorite piece of music, analyzes driver's favorite on the basis of the detected favorite information and storing analyzed resultant data, selects the favorite music piece on the basis of the analyzed resultant data, and provides the selected favorite music piece to the vehicle driver" (see paragraph [0010]) ".

As to claim 5, Robinson as modified teaches the method of claim 2.

Robinson as modified does not teach sorting, on the basis of environment in which the pieces of music are played, the selected pieces of music in ascending order or descending order.

Seto et al. teaches sorting, on the basis of environment in which the pieces of music are played, the selected pieces of music in ascending order or descending order (see Figure 3, "Location" column).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Robinson by the teaching of Seto et al., since Seto et al. teaches "providing a favorite piece of music to a vehicle driver during a driving operation of the vehicle driver, detects favorite information to discriminate favorite tendency of the vehicle driver with respect to the favorite piece of music, analyzes driver's favorite on the basis of the detected favorite information and storing analyzed resultant data, selects the favorite music piece on the basis of the analyzed resultant data, and provides the selected favorite music piece to the vehicle driver" (see paragraph [0010]).

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (US Patent 7,072,846) in view of Jacobi et al. (US Pre-Grant Publication 2006/0195362), and further in view of Ward et al. (US Patent 6,526,411).

As to claim 4, Robinson as modified teaches the method of claim 1.

Robinson as modified does not teach updating the played frequencies each time a piece of music is skipped.

Ward teaches updating the played frequencies each time a piece of music is skipped (see 8:28-35);

Robinson as modified teaches sorting, on the basis of the updated played frequencies, the selected pieces of music in ascending order or descending order (see Ward 8:28-35).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have modified Robinson by the teaching of Ward, since Ward teaches that "to provide a dynamic playlist system and method for a dynamic playlist of digital items that automatically adds items to, or subtracts items from, the playlist, as the items become available" (see 1:50-53).

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (US Patent 7,072,846) in view of Jacobi et al. (US Pre-Grant Publication 2006/0195362), and further in view of Cluts (US Patent 5,616,876).

Robinson as modified teaches the method of claim 1.

Robinson as modified does not teach acquiring, from a multi-channel digital broadcast, the pieces of music that serve as search targets.

Cluts teaches acquiring, from a multi-channel digital broadcast, the pieces of music that serve as search targets (see 2:33-48, and 7:56-65).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have modified Robinson by the teaching of Cluts, since Cluts teaches that "indeed, it is feasible that this interactive network will have sufficient bandwidth to supply hundreds of channels of programming information, thereby leading to an explosion of programming options available to subscribers" (see 1:40-44).

Response to Arguments

9. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is

filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles D. Adams whose telephone number is (571) 272-3938. The examiner can normally be reached on 8:30 AM - 5:00 PM, M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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